

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by: Esmail Hassanpour

GENERAL INFORMATION:

Name:	Bakery Feeds
Address:	221 Heilman Street Henderson, KY 42420
Date application received:	April 16, 2008
SIC Code/SIC description:	2048
Source ID:	21-101-00119
Agency Interest:	38442
Activity:	APE20080001
Permit:	F-08-018

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input checked="" type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

#### EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM <sub>10</sub>	20.38/18.79	66.94/63.00
SO <sub>2</sub>	4.67	16.10
NO <sub>x</sub>	22.80	60.75
CO	24.13	60.31
VOC	45.98	75.92

#### SOURCE DESCRIPTION:

Bakery Feeds applied to the Kentucky Division for Air Quality on April 16, 2008, to renew their current permit (F-03-008) in Henderson, KY. Bakery Feeds recycles waste bakery products consisting of cookies, crackers, cereals, breads, snack foods, dough, and similar products at Henderson, Kentucky. These materials are brought into the plant by tractor trailer and off-loaded inside the building directly onto the receiving floor. They are then blended using mobile equipment and moved to a staging area. The same mobile equipment then loads the product into the receiving hopper.

Raw materials are transferred from the receiving hopper to a hammermill to reduce the size of the materials to facilitate uniform drying of the product. Raw materials are moved from the hammermill by conveyor to a ten foot diameter by fifty foot long rotating drum dryer. The dryer reduces the moisture content of the raw materials. Product is moved through the dryer by tumbling action and by the movement of air pulled through the dryer, the drop out box at the end of the dryer and a product recovery cyclone by the induced air fan. All material removed in the drop box and the cyclone is put back into the process. All air is discharged through a stack immediately downstream of the fan.

Dried raw materials are conveyed to vibrating screens used to size the product and recover the packaging materials. Finished product passing through the screens is moved by covered screw conveyor to storage. Packaging materials are pneumatically removed from the screen, mixed with sawdust and fed into a hammermill for a final size reduction before being sent to the biomass burner to be used as fuel. The finished product that cannot pass through the vibrating screen is directed to a finishing mill for size reduction. Product is returned to the screen after the finishing mill to be resized. This cycle continues until the entire product passes through the screen and is placed into storage.

Finished product is finally moved from storage to the truck loading area where it is loaded onto trucks for delivery. Truck loading is conducted inside the building to minimize fugitive emissions. The biomass burner generates heat for the drying process by burning sawdust mixed with shredded packaging materials. Heat and products of combustion are pulled from the burner, through the dryer, the drop box and the dryer cyclone by the dryer exhaust fan. The fan then discharges this air by way of the 150 foot tall exhaust stack. The source is adding a potash transfer operation with emission of particulate matter less than five tons per year to the insignificant activity list in Section C of the permit.

#### EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

Volatile organic compounds (VOC(s)) emissions shall not exceed 90 tons per year on a twelve-month rolling total to preclude 401 KAR 51:012 applicability. The 90 ton per year VOC limit will prevent the bakery scrap drying from being considered a major source.

#### OPERATIONAL FLEXIBILITY:

None